

REMARKS

Claims 1–38 are now pending in the application. Applicants respectfully traverse and request reconsideration.

REJECTION UNDER 35 U.S.C. § 103

Claims 1–38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,184,604 to Mizuno et al. (“Mizuno”).

With regard to claim 1, Mizuno fails to show, teach, or suggest, inter alia, a first memory device that receives a video input signal containing an encoded video input frame comprising a plurality of portions of encoded video frame data, the first memory device having a storage capacity less than all of the plurality of portions of encoded video frame data for the encoded video frame and that receives a portion of the encoded video frame data.

As best understood by Applicants, Mizuno discloses a wavelet processing apparatus for executing a line-based wavelet transform that stores excess data used in a transformation process applied to already transformed data. Therefore, the line memory (204a) receives a portion of encoded frame data sets used during a reverse transformation process and not a portion of an encoded video frame. For example, the Examiner cites column 19, lines 41–58 as disclosing a first memory device that receives a video input signal containing an encoded video input frame comprising a plurality of portions of encoded video frame data, the first memory device having a storage capacity less than all of the plurality of portions of encoded video frame data for the encoded video frame and that receives a portion of the encoded video frame data. However, this portion merely discloses an embodiment to perform a reverse wavelet transform of wavelet transformed data. This embodiment works in substantially the same manner as the wavelet transform operation. However, in this embodiment, the line-based wavelet transform block is

replaced with a line-based reverse wavelet transform block. The readout block decomposes a wavelet transformed input image into strip regions in the horizontal direction and reads out data based thereon. The line-based reverse wavelet transform block performs a line-based reverse wavelet transform on the read out data. As best understood, in order to perform the line-based reverse wavelet transform, the line-based transform block temporarily stores excess data sets for each decomposition level of the reverse wavelet transform (i.e., reverse transformed portions of the wavelet transformed image) in line memory, and does not receive a portion of encoded video from data as claimed.

For example, when using a line memory that supports three decomposition levels of band decomposition, the line memory needs to have an extra storage area corresponding to a total of 77 (33 for the 5x3 filter) sets of excess data sets that are used in the wavelet decoding process. As such, it appears that the line memory in FIG. 37 does not receive an encoded portion of the encoded video frame but instead receives data sets used to decode the wavelet transform. Therefore, reconsideration and withdrawal of the rejection of claim 1 is respectfully requested.

Claims 10, 19, and 31 are allowable for at least similar reasons as claim 1. Therefore, reconsideration and withdrawal of the rejection of claims 10, 19, and 31 is respectfully requested.

Claims 2–9, 11–18, 20–30, and 32–38 each ultimately depend on claims 1, 10, 19, and 31, respectively, and are allowable for at least similar reasons. Therefore, reconsideration and withdrawal of the rejection of claims 2–9, 11–18, 20–30, and 32–38 is respectfully requested.


CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner

reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (312) 609-7599.

Respectfully submitted,

Date: 7-18-07

By: 
Christopher J. Reckamp
Registration No. 34,414

Vedder, Price, Kaufman & Kammholz, P.C.
222 North LaSalle Street, Suite 2600
Chicago, Illinois 60601
phone: (312) 609-7599
fax: (312) 609-5005